

**METHOD AND APPARATUS FOR MAPPING SOFTWARE PREFETCH INSTRUCTIONS TO HARDWARE PREFETCH LOGIC**

**ABSTRACT OF THE DISCLOSURE**

A method and apparatus for mapping some software prefetch instructions in a  
5 microprocessor system to a modified set of hardware prefetch instructions and executing  
the software prefetch by invoking the corresponding modified hardware prefetch  
instruction. For common software prefetch access patterns, by mapping the software  
prefetches to hardware, improved prefetching can be achieved without the need for  
additional hardware.

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TOP SECRET \* CONTROLLED